CLAIMS

1. An instantaneous mechanism for controlling the date indicator (24) of a timepiece movement, characterized in that it comprises:

- a 24-hour wheel (10) driven by the movement at the rate of one revolution per day and pierced with a first cutout (12b),
- a date driving wheel (16) mounted to rotate freely on the 24-hour wheel (10), coaxial therewith, said wheel having a pin (18) which fits into said cutout and a fixed tooth (20) which collaborates with said indicator (24) to cause it to move on step by step each day at around midnight, and
- a spring balance (26, 32) in direct contact with the pin (18),
- these components being shaped, sized and arranged in such a way as to perform the following cycle of operations:
  - a few hours before midnight, the pin (18) begins to act on the balance (26), then in its rest position, thereby arming its spring (32),
  - at around midnight, the balance (26) escapes from the pin (18) and returns abruptly to its rest position, throwing forward the pin (18) and the driving wheel (16) whose tooth (20) strikes the date indicator (24) to cause it to move on by one step, and
  - a few hours after midnight, the pin (18) is once again caught by the cutout (12b) in the 24-hour wheel (19) and pushed until, a few hours before midnight, it comes back into contact with the balance (26).

2. The mechanism as claimed in claim 1, characterized in that the first cutout (12b) is in the shape of an arc of a circle concentric with the 24-hour wheel (10).

3. The mechanism as claimed in one of claims 1 and 2, characterized in that the first cutout (12b) is the continuation of a second cutout (12a) releasing a spring finger (14), the first cutout (12b) opening onto the end (14a) of the spring finger (14).

4. The mechanism as claimed in claim 3, characterized in that said spring finger (14) is in the shape of a hairpin.

5. The mechanism as claimed in claim 3, characterized in that the angular separation between the end (12c) of the first cutout (12b) of the end (14a) of the spring finger is of the order of 90°.

6. The mechanism as claimed in one of claims 1 to 5, characterized in that the angular separation between the pin (18) and the tooth (20) of the driving wheel (16) is of the order of 45°.

7. The mechanism as claimed in one of claims 1 to 6, characterized in that the spring balance comprises a lever (26) mounted to pivot on an arbor (28) and having an elbow (30) against the upstream flank (30a) of which the pin (18) presses and slides in such a way as to cause said lever to pivot and the downstream flank (30b) of which is used, by contrast, to propel said pin forward.

8. The mechanism as claimed in claim 7, characterized in that the lever (26) is extended, beyond its arbor (28), by a spring (32), the end of which rests against a peg (34).

9. The mechanism as claimed in one of claims 7 and 8, characterized in that the elbow (30) of the lever makes an angle of about 135°.